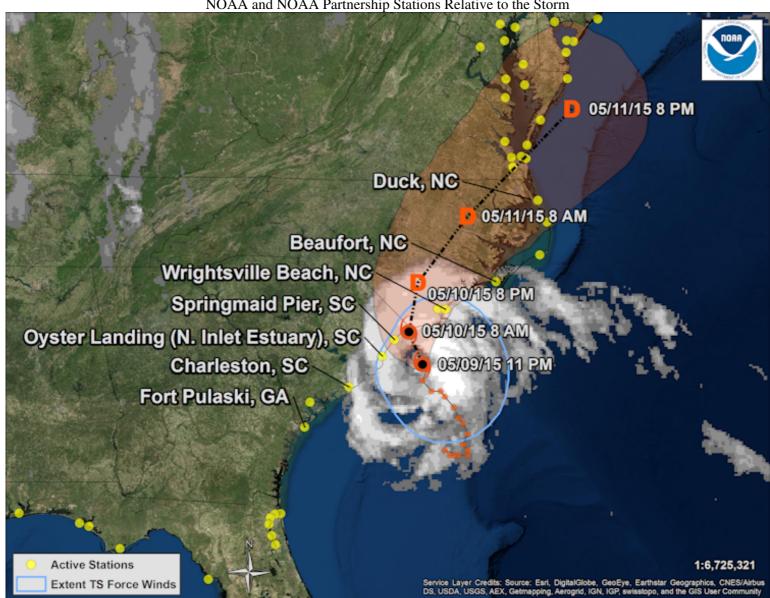


NOAA and NOAA Partnership Stations Relative to the Storm



# Storm Analysis

As of 05/10/2015 00:00 EDT, water levels from Georgia to North Carolina are elevated above normal tide levels. Water levels at Wrightsville Beach and Beaufort, NC are rising as Ana approaches the coastline and range between 0.75 and 1.5 feet above tidal predictions. Water levels along the coast of Georgia and South Carolina generally range between 0.5 and 1.0 feet above tidal predictions. Wind speeds from Springmaid Pier, SC to Beaufort, NC range from 15 to 30 knots with slightly higher gusts. Barometric pressure is falling at Springmaid Pier but is level elsewhere

across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u>Homepage.

Analyst: PFF

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM ANA ADVISORY NUMBER 9

NWS NATIONAL HURRICANE CENTER MIAMI FL

1100 PM EDT SAT MAY 09 2015

...CENTER OF ANA EXPECTED TO REACH THE COAST BY EARLY SUNDAY MORNING...

WATCHES AND WARNINGS

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A Tropical Storm Warning is in effect for...

\* South Santee River South Carolina to Cape Lookout North Carolina

Interests elsewhere in eastern North Carolina and Virginia should monitor the progress of Ana.

For storm information specific to your area, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office.

DISCUSSION AND 48-HOUR OUTLOOK

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At 1100 PM EDT (0300 UTC), the center of Tropical Storm Ana was located ABOUT 50 MI...80 KM SE OF MYRTLE BEACH SOUTH CAROLINA. Ana is moving toward the north-northwest near 5 mph (7 km/h). A turn toward the north and northeast with a gradual increase in forward speed is expected over the next 48 hours. On the forecast track, the center of Ana is expected to reach the coast of northeastern South Carolina or southern North Carolina late tonight or early Sunday morning.

Maximum sustained winds are near 60 mph (95 km/h) with higher gusts. Gradual weakening is forecast to begin overnight as Ana moves over cooler waters close to the coast. A more rapid rate of weakening should begin after the center moves inland.

Tropical storm force winds extend outward up to 125 miles (205 km) from the center. NOAA buoy 41013, located about 35 miles (55 km) south-southeast of Cape Fear North Carolina, has recently reported sustained winds of 47

mph (76 km/h) with a gust to 60 mph (97 km/h).

The latest minimum central pressure reported by an Air Force Reserve reconnaissance aircraft was 1000 mb (29.53 inches).

## HAZARDS AFFECTING LAND

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WIND: Tropical storm conditions are expected within portions of the warning area overnight and on Sunday.

STORM SURGE: The combination of storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters. The water could reach 1 to 2 ft above ground at times of high tide in coastal areas from Cape Hatteras, North Carolina southward through South Carolina. For information specific to your area, please see products issued by your local National Weather Service forecast office.

RAINFALL: Ana is expected to produce rainfall accumulations of 2 to 4 inches, with isolated maximum amounts of 6 inches over eastern portions of North Carolina and South Carolina through Monday.

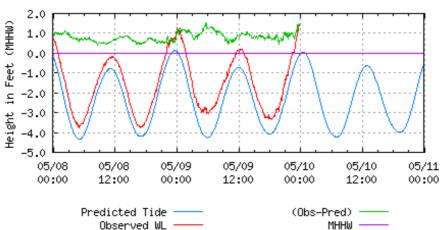
SURF: Swells generated by Ana are affecting portions of the southeastern U.S. coast. These swells will likely cause life-threatening surf and rip currents. Please see statements issued by your local National Weather Service forecast office.

## Forecaster Brown/Kimberlain

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

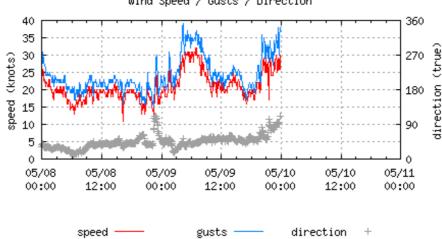
Jump to: Wrightsville Beach - Water Level, Wrightsville Beach - Winds, Wrightsville Beach - Barometric, Beaufort - Water Level, Beaufort - Winds, Beaufort - Barometric, Springmaid Pier - Water Level, Springmaid Pier - Winds, Springmaid Pier - Barometric, Oyster Landing (N Inlet Estuary) - Water Level, Charleston - Water Level, Charleston - Winds, Fort Pulaski - Water Level, Fort Pulaski - Winds, Duck - Water Level, Duck - Winds

# NOAA/NOS/CO-OPS $\underline{8658163~Wrightsville~Beach,~NC}$ Preliminary Water Level, relative to Mean Higher High Water(MHHW)



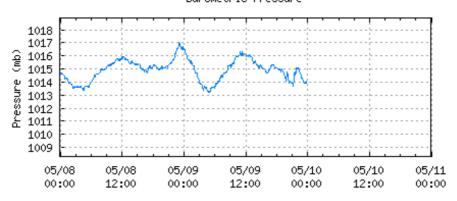
Last Observed Sample: 05/09/2015 23:48 (EDT). Data relative to MHHW Observed: 1.39 ft. Predicted: -0.06 ft. Residual: 1.45 ft. Historical Maximum Water Level: Sep 25 2008, 2.81 ft. Next High Tide: 05/10/2015 00:28 (EDT), 0.06 ft.

# NOAA/NOS/CO-OPS <u>8658163 Wrightsville Beach, NC</u> Wind Speed / Gusts / Direction



Last Observed Sample: 05/09/2015 23:48 (EDT) Wind Speed: 26 knots Gusts: 38 knots Direction: 112° T

# NOAA/NOS/CO-OPS <u>8658163 Wrightsville Beach, NC</u> Barometric Pressure



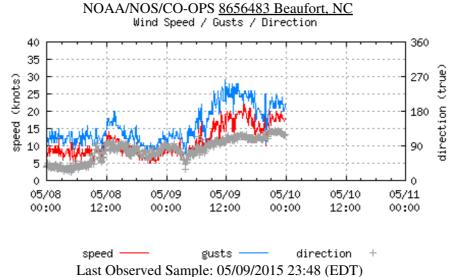
barometric pressure ——
Last Observed Sample: 05/09/2015 23:48 (EDT)
Barometric Pressure: 1014.1 mb

#### NOAA/NOS/CO-OPS 8656483 Beaufort, NC Preliminary Water Level, relative to Mean Higher High Water(MHHW) 1.0 Height in Feet (MHHW) 0.5 0.0 -0.5-1.0 -1.5-2.0 -2.5 -3.0 -3.505/08 05/08 05/09 05/09 05/10 05/10 05/11 12:00 00:00 12:00 00:00 12:00 00:00 00:00 Predicted Tide (Obs-Pred)

Last Observed Sample: 05/09/2015 23:48 (EDT). Data relative to MHHW Observed: 0.41 ft. Predicted: -0.30 ft. Residual: 0.71 ft. Historical Maximum Water Level: Sep 14 2005, 3.01 ft. Next High Tide: 05/10/2015 01:01 (EDT), -0.02 ft.

MHHW

Observed WL



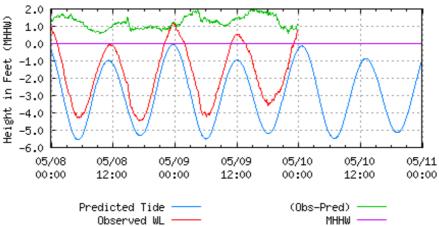
Wind Speed: 17 knots Gusts: 22 knots Direction: 119° T

#### NOAA/NOS/CO-OPS 8656483 Beaufort, NC Barometric Pressure 1018 1017 1016 1015 Pressure (mb) 1014 1013 1012 1011 1010 1009 05/08 05/08 05/09 05/09 05/10 05/11 05/10 00:00 12:00 00:00 12:00 00:00 00:00 12:00 barometric pressure

Last Observed Sample: 05/09/2015 23:48 (EDT)

Barometric Pressure: 1018.1 mb

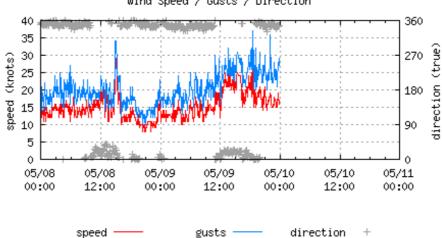
# $NOAA/NOS/CO-OPS ~\underbrace{8661070~Springmaid~Pier,~SC}_{Preliminary~Water~Level,~relative~to~Mean~Higher~High~Water(MHHW)}$



Last Observed Sample: 05/09/2015 23:48 (EDT). Data relative to MHHW Observed: 0.77 ft. Predicted: -0.34 ft. Residual: 1.11 ft.

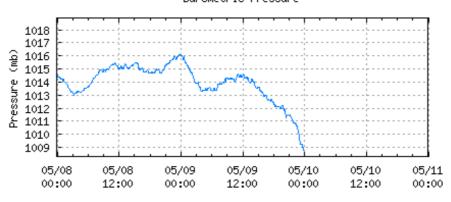
Historical Maximum Water Level: Jan 1 1987, 3.65 ft. Next High Tide: 05/10/2015 00:37 (EDT), -0.14 ft.

## NOAA/NOS/CO-OPS <u>8661070 Springmaid Pier, SC</u> Wind Speed / Gusts / Direction



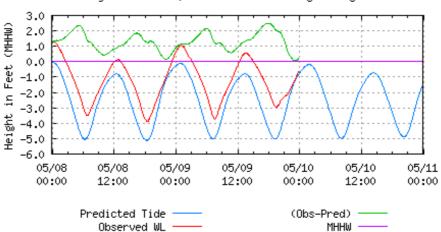
Last Observed Sample: 05/09/2015 23:48 (EDT) Wind Speed: 16 knots Gusts: 27 knots Direction: 347° T

# NOAA/NOS/CO-OPS <u>8661070 Springmaid Pier, SC</u> Barometric Pressure

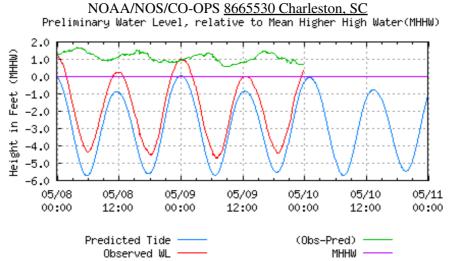


barometric pressure ——
Last Observed Sample: 05/09/2015 23:48 (EDT)
Barometric Pressure: 1008.8 mb

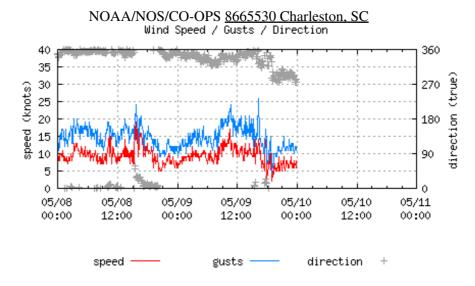
# NOAA/NOS/CO-OPS <u>8662245 Oyster Landing (N Inlet Estuary)</u>, <u>SC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



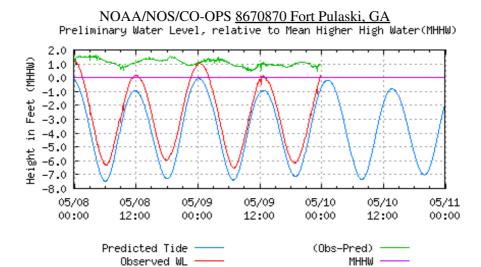
Last Observed Sample: 05/09/2015 23:48 (EDT). Data relative to MHHW Observed: -0.62 ft. Predicted: -0.83 ft. Residual: 0.21 ft. Historical Maximum Water Level: Aug 26 2011, 2.40 ft. Next High Tide: 05/10/2015 01:52 (EDT), -0.18 ft.



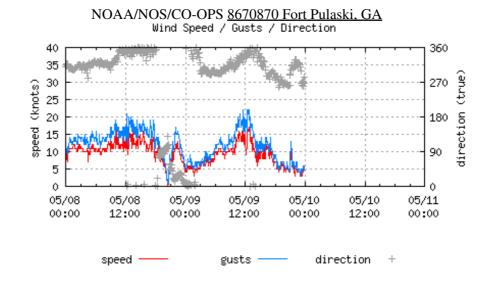
Last Observed Sample: 05/09/2015 23:48 (EDT). Data relative to MHHW Observed: 0.36 ft. Predicted: -0.37 ft. Residual: 0.73 ft. Historical Maximum Water Level: Sep 21 1989, 6.76 ft. Next High Tide: 05/10/2015 00:56 (EDT), -0.06 ft.



Last Observed Sample: 05/09/2015 23:48 (EDT) Wind Speed: 8 knots Gusts: 12 knots Direction: 274° T



Last Observed Sample: 05/09/2015 23:48 (EDT). Data relative to MHHW Observed: 0.16 ft. Predicted: -0.81 ft. Residual: 0.97 ft. Historical Maximum Water Level: Oct 15 1947, 3.40 ft. Next High Tide: 05/10/2015 01:11 (EDT), -0.17 ft.



Last Observed Sample: 05/09/2015 23:48 (EDT) Wind Speed: 5 knots Gusts: 5 knots Direction: 284° T

#### NOAA/NOS/CO-OPS 8651370 Duck, NC Preliminary Water Level, relative to Mean Higher High Water(MHHW) 0.5 Height in Feet (MHHW) 0.0 -0.5-1.0 -1.5-2.0 -2.5 -3.0 -3.5 -4.0 05/09 05/08 05/08 05/09 05/10 05/10 05/11 00:00 12:00 00:00 12:00 00:00 12:00 00:00

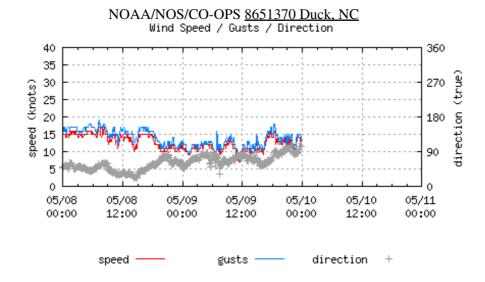
Last Observed Sample: 05/09/2015 23:48 (EDT). Data relative to MHHW Observed: 0.02 ft. Predicted: -0.16 ft. Residual: 0.18 ft. Historical Maximum Water Level: Sep 18 2003, 4.13 ft. Next High Tide: 05/10/2015 00:22 (EDT), -0.08 ft.

(Obs-Pred)

MHHW

Predicted Tide

Observed WL



Last Observed Sample: 05/09/2015 23:48 (EDT) Wind Speed: 12 knots Gusts: 13 knots Direction: 104° T

# Latest Water Level Observations on MHHW

Station II	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8658163	Wrightsville Beach, NC	05/09/2015 23:48 (EDT)	1.39 ft	-0.06 ft	1.45 ft	1.39 ft
8656483	Beaufort, NC	05/09/2015 23:48 (EDT)	0.41 ft	-0.30 ft	0.71 ft	0.72 ft
8661070	Springmaid Pier, SC	05/09/2015 23:48 (EDT)	0.77 ft	-0.34 ft	1.11 ft	1.14 ft
8662245	Oyster Landing (N Inlet Estuary), SC	05/09/2015 23:48 (EDT)	-0.62 ft	-0.83 ft	0.21 ft	1.05 ft
8665530	Charleston, SC	05/09/2015 23:48 (EDT)	0.36 ft	-0.37 ft	0.73 ft	1.01 ft
8670870	Fort Pulaski, GA	05/09/2015 23:48 (EDT)	0.16 ft	-0.81 ft	0.97 ft	1.03 ft
8651370	Duck, NC	05/09/2015 23:48 (EDT)	0.02 ft	-0.16 ft	0.18 ft	0.12 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce